

Intro Sheet: Pivot Tables

Goal: Learn how to use a pivot table to summarize data

Instructions for setting up a pivot table

1. Get your data set into a spreadsheet. In this class, we will use the data set that is posted in Canvas. Your data needs to have headers at the top of each column, and there need to be no missing entries in the column.
2. Select your entire data set, by cells, including the column headers.
3. Select “Summarize with Pivot Table” or something similar. In Google Sheets, this is located in **Insert > Pivot Table**. In Excel for Mac, **Data Menu > Summarize With Pivot Table**. In Excel for Windows, using the toolbars at the top, maybe the **Insert** tab on the toolbar, and then PivotTable is to the left?
4. Put your pivot table in a new worksheet.
5. Use the headers to decide what to put in the rows and columns of your table, and what values you want to count up. In our example, we will have the Value be course enrollment, and we will put various things in the rows and columns.

Getting some data

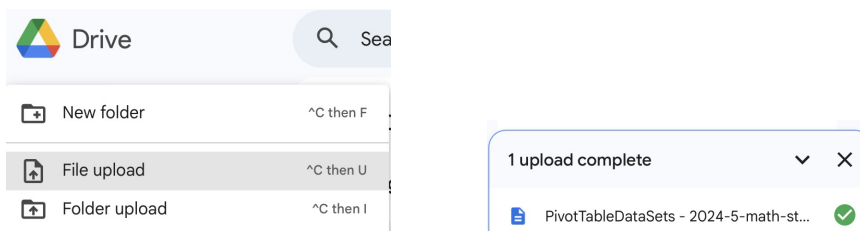
1. Download the .csv file `PivotTableDataSets - 2024-5-math-stat.csv` from Canvas, in the Activity 24 page. Click on the little icon next to it to download.

Activity 24: Pivot Tables

[PivotTableDataSets - 2024-5-math-stat.csv](#) 

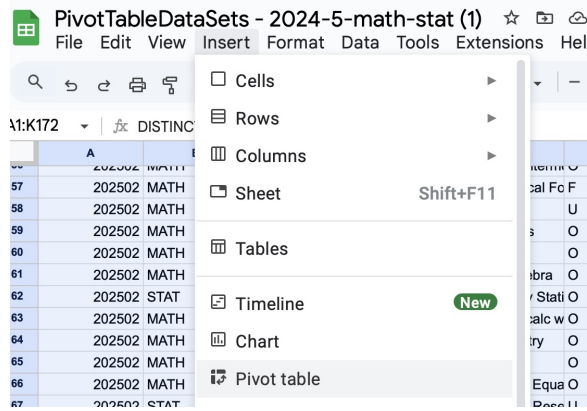
Figure out how to open it in Google Sheets (or your spreadsheet of choice). One possibility is the following:

Go to Google Drive, click the **+ New** button, click File Upload, navigate to where you saved the .csv you just downloaded, and after it uploads, click on the file you just uploaded to Drive. It should open in a Google Sheets page.



Analyzing the data

- (a) Select the data cells in your spreadsheet and go to **Insert > Pivot Table**. When it asks, create it in a New Sheet.



- (b)
 - i. Under Rows, click Add and then COURSE_TITLE.
 - ii. Under Columns, Add and then DISTINCT COURSE_TERM_CODE.
 - iii. Under Values, add COURSE_ENROLLMENT.
- (c) What does this Pivot Table tell us? The semester code 202403 means Fall 2024, 202501 means Spring 2025, and 202502 means Summer 2025.

How many students took Numbers and Society in Spring 2025? _____ How many students took Numbers and Society in total? _____

- (d) Under Rows, Add COURSE_INSTRUCTOR. How does the pivot table change? What does it tell us?

How many instructors taught Numbers and Society in Spring 2025? _____

- (e) Go to Rows, and click and drag to change the order of the items so that COURSE_INSTRUCTOR is above COURSE_TITLE. Now what does the pivot table tell you?

- (f) Add another Column, CourseAbbrev. What happens? Change the order of CourseAbbrev and DISTINCT COURSE_TERM_CODE. Now what does the pivot table tell us?
- (g) Click the X to delete COURSE_INSTRUCTOR from Rows and instead put in COURSE_SUBJ_CODE. Now what is this pivot table counting?

- (h) What happens if you delete COURSE_TITLE from Rows as well?